UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,069	02/18/2004	Armin Meinzer	100-8388C	1856

1095 7590 08/03/2007

NOVARTIS
CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER	
CHANNAVAJJALA, LAKSHMI SARADA	
ART UNIT	**PAPER NUMBER**
1615	
MAIL DATE	**DELIVERY MODE**
08/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/781,069	MEINZER ET AL.	
	Examiner	Art Unit	
	Lakshmi S. Channavajjala	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Receipt of response dated 5-16-07 is acknowledged.

Claims 12-26 are pending in the instant application.

Double Patenting

Claims 12-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,432,445 ('445) in view of US 5,962,019 ('019). '445 claim a capsule comprising cyclosporin, a polyoxyethylene sorbitan fatty acid ester, a reaction product of a natural or hydrogenated castor oil and ethylene glycol and ethanol. Component C of the '445 capsule reads on the instant surfactant. '445 capsules do not contain the polyethylene glycol of the instant claims.

'019 teach hard gelating capsules comprising cyclosporin formulations (abstract, col. 3 L 10-25). '019 teaches that the compositions contain an orally acceptable vehicle comprising at least one alkanol solvent constituting an alkanol having 2 to 3 carbon atoms and a co-solvent selected from fatty acids and diols (col. 4, L 28-41). Among the diols, '019 teach the claimed polyethylene glycols (col. 5, L 1-25 and examples in col. 8-10). '019 further teach incorporating at least one surfactant, such as polyoxyalkylene surfactant having an HLB value of 5 to 20 or preferably 8 to 16. Thus, both '445 and '019 are directed to cyclosporin containing capsule formulations. It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to include polyethylene glycol, of '019 in the cyclosporin composition of '445 as a co-solvent for the lower alkanol solvent of '445 because '019 teach that the polyethylene

glycol co-solvents adsorb water molecules, which may be present in the formulations thereby reducing the possibility for precipitation of the cyclosporin from the formulations, and also impart desirable properties such as viscosity, stability etc. Accoridngly, a skilled artisan would have expected to achieve greater stability of the composition of '445 by incorporating the PEG of '019.

Claims 12-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,767,555 ('445) in view of US 5,962,019 ('019).

'555 claim a capsule comprising cyclosporin, a polyoxyethylene sorbitan fatty acid ester, a reaction product of a natural or hydrogenated castor oil and ethylene glycol and ethanol. Component C of the '555 capsule reads on instant surfactants. '555 capsules do not contain the polyethylene glycol of the instant claims.

'019 teach hard gelating capsules comprising cyclosporin formulations (abstract, col. 3 L 10-25). '019 teaches that the compositions contain an orally acceptable vehicle comprising at least one alkanol solvent constituting an alkanol having 2 to 3 carbon atoms and a co-solvent selected from fatty acids and diols (col. 4, L 28-41). Among the diols, '019 teach the claimed polyethylene glycols (col. 5, L 1-25 and examples in col. 8-10). '019 further teach incorporating at least one surfactant, such as polyoxyalkylene surfactant having an HLB value of 5 to 20 or preferably 8 to 16. Thus, both '555 and '019 are directed to cyclosporin containing capsule formulations. It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to

include polyethylene glycol, of '019 in the cyclosporin composition of '555 as a co-solvent for the lower alkanol solvent of '555 because '019 teach that the polyethylene glycol co-solvents adsorb water molecules, which may be present in the formulations thereby reducing the possibility for precipitation of the cyclosporin from the formulations, and also impart desirable properties such as viscosity, stability etc. Accoridngly, a skilled artisan would have expected to achieve greater stability of the composition of '555 by incorporating the PEG of '019.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 12-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,342,625 to Hauer et al (Hauer) in view of US 5,962,019 ('019) to Cho.

Hauer teaches cyclosporin comprising pharmaceutical compositions in the form of microemulsion pre-concentrates and that are filled in hard gelatin capsules (abstract, examples, col. 29, lines 11-14). Examples in col. 26-29 are directed cyclosporin formulation, which include surfactants Cremophor RH 40, which is described as a reaction products of hydrogenated or natural vegetable oil and ethylene glycol, with an HLB value of 14-16. Thus, the surfactant of Hauer meets the claimed surfactant component. Hauer also teaches composition comprising propylene glycol and ethanol that read on the claimed lower alkanols (col. 18, last paragraph to col. 19, 1st paragraph). The pre-concentrate compositions of Hauer are free of water and form

spontaneous emulsions (col. 5, lines 57 through col. 6, lines 35) and hence meet the claims 22, 23 and 26. Hauer teaches various amounts of cyclosporin in the examples that is within the claimed ranges (claim 16). Not all of the compositions of Hauer contain additional oils and the claimed lower alkanols.

Hauer fails to teach polyethylene glycol in combination with the lower alkanols. Cho teaches hard gelating capsules comprising cyclosporin formulations (abstract, col. 3 L 10-25). Cho teaches that the compositions contain an orally acceptable vehicle comprising at least one alkanol solvent constituting an alkanol having 2 to 3 carbon atoms and a co-solvent selected from fatty acids and diols (col. 4, L 28-41). Among the diols, Cho teaches the claimed polyethylene glycols (col. 5, L 1-25 and examples in col. 8-10). 'Cho teach incorporating at least one surfactant, such as polyoxyalkylene surfactant having an HLB value of 5 to 20 or preferably 8 to 16. Thus, both Hauer and Cho teach cyclosporin compositions comprising a surfactant and hydrophilic solvents, constituting analogous art. Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to include polyethylene glycol, of Cho in the cyclosporin composition of Hauer as a co-solvent for the lower alkanol solvent of because Cho teaches that the polyethylene glycol co-solvents adsorb water molecules, which may be present in the formulations thereby reducing the possibility for precipitation of the cyclosporin from the formulations, and also impart desirable properties such as viscosity, stability etc. Accoridngly, a skilled artisan would have expected to achieve greater stability of the composition of Hauer containing cyclosporin by incorporating the PEG of '019. Further, optimizing the amount of solvents and co-

solvents in the composition of Hauer with an expectation to achieve the desired solubility and optimum stability would have been within the scope of a skilled artisan. While Hauer does describe oils, the examples of Hauer do not necessarily contain oils and further instant specification does not define what "substantially free of oils" stands or the upper limit that meets the limitation. Therefore, Hauer still teaches compositions that are substantially free of oils, as claimed.

Response to Argument

Applicant's arguments filed 5-16-07 have been fully considered but they are not persuasive.

Applicants argue that the hydrophilic component of Hauer is not the same as the instant and that the composition of Hauer contains a saccharide, which is not required. However, Cho has been cited for the teaching of hydrophilic component and that the instant "comprising" language allows for the saccharide of Hauer. It is argued that Hauer teaches additional oils, which according to the instant claims is not allowed. However, Hauer also teaches examples without oils, as also pointed out in the previous action instant application does not set any higher limit for the additional oils allowed in the instant composition. Accordingly, the presence of additional oils in certain examples of Hauer is still permissible. Further, while arguing that the reference teaches high amounts (16%), applicants have not shown any unexpected effect with the claimed "substantially free of oils". It is argued that Cho requires at least one non-ionic

polyoxyalkylene surfactants, which is different from the instant surfactant. The arguments are not persuasive because Cho has not been cited for the above surfactants and instead for polyethylene glycol, which as explained in the previous action for the adsorption of water and thus reduce the precipitation of cyclosporine. With respect to the argument that Hauer teaches the claimed surfactant either in combination with other surfactants or in the absence of claimed polyethylene glycol, it is clear form the teachings of Hauer that the compositions of Hauer do not necessarily contain either oils or surfactants, nor the presence of surfactants in excluded by the claimed "comprising" language. With respect to the argument that claim terms should be construed with their ordinary meaning and as determined by those of ordinary skill in the art, the argued term is not always used in the same meaning. In other words, "substantial" for one component is not always the same for another, depending on the amount of the component required to obtain optimum activity. As explained above, applicants have not shown as to how the presence of the oils affects the composition of Hauer.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to the double patenting rejections of record, it is argued that the patent claims do not define an invention that is an obvious variation of the instant claims, that they lack claimed polyethylene glycol and it would not have been obvious to prepare a composition that is substantially free of oils and that the specification recites fatty acids suggesting oils. However, the arguments are not persuasive because the patented claims do not recite any additional oils and thus can be interpreted as containing no additional oils. For the claimed PEG, as explained the secondary reference of Cho teaches PEG for its ability to prevent the precipitation of cyclosporine, providing the requisite motivation for the combination.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 7.00 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AU 1615
July 30, 2007

LAKSHMI S. CHANNAVAJJALA
PRIMARY EXAMINER